

SCECAP 2004 -- Tidal Creeks

Sediment characteristics, contaminants, and toxicity

Station	Characteristics			Contaminants				Toxicity				
	Percent Silt/Clay	TOC % of Total	TAN (mg/l)	ERMQ	Metals*	PAHs*	Pest*	PCBs*	Microtox® Assay		Seed Clam Assay	
									EC ₅₀ Percent	Toxic	Mean Growth	Toxic
RT042061	16.7	0.6	1.7	0.007					0.4	†	21.9	
RT042062	73.2	3.3	2.6	0.028	1				2.0		-31.5	†
RT042063	88.1	4.635	0.4	0.043	1				0.4		0.8	†
RT042064	5.7	0.1	1.3	0.006					2.3		2.8	†
RT042067	9.4	0.4	1.5	0.005					0.1	†	26.6	
RT042068	7.0	0.5	1.3	0.008					0.3	†	12.5	†
RT042069	28.7	0.2	0.7	0.008					0.9		52.4	
RT042070	80.0	4.9	2.4	0.055	2				0.1	†	-13.7	†
RT042072	62.1	2.1	1.7	0.038	1				0.4		29.4	
RT042073	7.0	0.1	1.2	0.008					0.9		23.9	
RT042074	31.8	0.8	1.5	0.014					0.1	†	25.3	
RT042075	31.6	2.1	3.7	0.021	1				0.3		21.4	
RT042076	27.5	1.1	1.6	0.017	1				0.0	†	24.6	
RT042077	4.8	0.1	1.7	0.003					8.2		23.1	
RT042078	5.9	0.3	1.2	0.007					0.7		24.0	
RT042079	29.2	0.9	1.7	0.013					0.2	†	11.8	
RT042080	8.9	0.2	1.6	0.008					0.3	†	28.1	
RT042081	19.7	0.6	0.9	0.007					3.8		17.3	
RT042082	20.9	0.9	2.3	0.017					0.4		22.8	
RT042083	9.0	0.2	1.2	0.007					0.2	†	22.8	
RT042084	30.5	1.6	3.0	0.015					0.1	†	22.6	
RT042086	2.0	0.0	1.5	0.003					11.9		29.7	
RT042087	16.0	0.5	1.2	0.013					0.5	†	35.4	
RT042088	25.6	0.7	1.8	0.013					0.1	†	32.7	
RT042089	28.6	1.4	5.0	0.013					0.1	†	23.1	
RT042191	15.2	0.5	3.5	0.012					0.2	†	25.6	
RT042193	7.0	0.2	2.0	0.020	1				0.3	†	41.7	
RT042194	37.6	3.2	10.7	0.035		1			0.3		-20.3	
RT042195	3.9	0.1	1.0	0.006					6.9		33.4	
RT042196	45.2	1.3	3.1	0.024	1				0.7		35.9	
**RT042266	45.4	3.2	4.2	0.036					0.0	†	21.0	†
Mean	26.0	1.1	2.2	0.016					1.4		20.2	

† = Toxic: Microtox, EC₅₀ <0.5 if silt-clay < 20% , <0.2 if silt-clay > 20% (Ringwood et al., 1997, criterion #6); Seed Clam Assay, if mean clam growth is < 80% of mean clam control growth AND significantly different from mean clam control growth

■ Values exceed threshold representing moderate risk of benthic impacts (Hyland et al., 1999)

■■ Values exceed threshold representing high risk of benthic impacts (Hyland et al., 1999)

* Number of analytes that exceed Effects Range Low (ER-L) guidelines (Long et al., 1995)

**Additional station sampled in Charleston Harbor which is not included in the mean